

REMARKS

Careful consideration of this application in view of the present remarks is most respectfully requested. This is a response to the Office Action dated May 22, 2007. Claims 1-21 and 25-27 are pending in this application. Claims 4 and 6 are noted as allowable, but are objected to as being dependent on a rejected base claim. These claims have been left in dependent form as it is respectfully asserted that the base claims are allowable in their current form.

The Background Art Rejections are Improper:

Claims 1, 2, 5, 9, 10, 13, 17, 18, 20, 21 and 25-27 are rejected under 35 U.S.C. section 102(e) as being anticipated by Boden et al. This rejection is respectfully traversed.

The applicant thanks the Examiner for the further discussion on page 3 of the Office Action. In this section, the Examiner remarks that:

Boden teaches an incoming IPsec'd packet 100 containing network provider advertising information is received at the access router (Boden, paragraph 0062). The access router, in order to avoid a conflict due to overlapping remote address spaces, makes modifications to the incoming advertisement information so that conflicts do not occur on the destination network (see Boden paragraphs 0062-72 and the connection process detailed in Table 3 where gateway A modifies the advertisement information to be compatible with node A1's network). The access router then sends this information on to the client node. The client node responds if a connection is desired, and if so, a communication tunnel is established where the client node is able to send and receive data packets to the desired destination (Boden, see fig. 13 steps 188-194 where the advertising information in step 181 is forwarded to node A1 to establish the connection). Additionally, language limiting the prior art from making modifications to transferred network advertising information is not present in the rejected claims.

Claim 1:

It is respectfully asserted that the rejection is improper with respect to claim 1 at least for the following reasons. First, Boden fails to teach “sending serving network provider advertising information to said client node” as recited by claim 1. While the Examiner still has not named what portion of the packet 100 of Boden the Examiner considers to be network advertising information, in the above remarks, the Examiner indicates that the access router modifies the incoming advertisement information and sends the same on to the client node. Looking at the teachings of Boden, the modified portion of the packet 100 being sent to the node A1 corresponds to the *source IP address* (referred to in Boden as both “sip” and “src ip” – see paragraph 37, for example). However, as discussed in more detail below, the new source IP address (sip) sent to node A1 (what the Examiner identifies as the client node) is selected from a pool of administratively reserved IP addresses in gateway 52. Thus, the new source IP address provides no information regarding the serving network, let alone serving network provide advertising information.

Boden addresses the problem of remote networks having IP addresses which overlap with each other. Paragraph 0005 discusses an example where company A has a VPN gateway and wants to set up two VPN connections, one with a supplier and another with a west coast branch office, both having a system with an IP address of 1.2.3.4. Boden indicates two problems are caused by the overlapping addresses: (1) If two packets with IP address 1.2.3.4 from different 1.2.3.4 systems are both going to the same server in company A’s network, how can the server tell them apart? and (2) what does VPN gateway A do with a response packet with a destination IP address of 1.2.3.4 (in this example, should it go to the supplier’s subnet or the branch office’s subnet both with an IP

address of 1.2.3.4)?

Boden addresses this problem by utilizing a VPN gateway with a network address translation (NAT) function. During *inbound* processing, the source IP address (sip) is translated using the VPN source-in NAT. For example, in Table 3, step 188, “Gateway 52 changes the packet source IP 102 to lhs 114 100.123.254.5 and forwards it (packet 122) to node A1 47 (100.123.5.11).” Note that this lhs address is initially created within the bind table 58 by selecting an address from a pool of IP addresses (VPN NAT pool 60) which are administratively reserved within the A network (see paragraph 0049 and 0043).

In summary, during inbound processing, a source IP address (sip) is translated from the actual sip to a unique sip selected from an address pool. While this new unique sip may indeed be transmitted to node A1, it is not “serving network provider advertising information”. *In fact, it provides no information whatsoever of the serving network provider, as it selected from a pool 60 (in VPN gateway 52) of administratively reserved IP addresses.* Having been selected from pool 60, this new source IP address (sip) could be associated with any external network, and there is no teaching that node A1 has any ability to assess anything about the serving network provider based on the new translated sip.

In addition, the remote networks may have overlapping addresses, as noted above. Therefore, if the original source IP address (sip) may be the same between several remote networks, it is unclear how even the unmodified original source IP address (sip) may be considered to qualify as “serving network provider advertising information”.

Thus, because Boden fails to teach “sending serving network provider

advertising information to said client node” as recited by claim 1, it is respectfully asserted for this reason alone the rejection is improper and should be withdrawn.

Second, claim 1 requires “establishing a communication tunnel between said client node and said access router through said access network”. The rejection also is improper as Boden fails to teach this recitation as well.

In the rejection, the Examiner highlights network A (42) and node A1 in FIG. 4 as meeting the recitation of “providing an access network to which a client node has a network connection. The Examiner highlights paragraph 0073-0076 and FIGS. 5 and 12 as teaching “establishing a communication tunnel between said client node and said access router through said access network, ...” While FIG. 12 does illustrate a VPN tunnel 138, this tunnel is neither between “between said client node and said access router” (as identified by the Examiner, node A1 and VPN gateway A) nor “through said access network” (as identified by the Examiner, network A), and thus fails to meet the requirements of claim 1 for these additional reasons.

Examining Boden in more detail, “SA data 204 is used to process in 136 *outbound* packet 130 *into* VPN tunnel 138” (paragraph 0077 – emphasis added). This is confirmed by the labeling and arrows in FIG. 12. Thus, the tunnel referred to here is not from VPN gateway A through network A to node A1 (this is the *inbound* direction – see first line of paragraph 0062, e.g.), but from VPN gateway A to another external gateway (e.g., VPN gateway B or C in FIG. 4. See also paragraph 0004 of Boden, which clarifies that the tunnel connections (in Boden, a ‘VPN connection’) are from remote systems and gateways:

Each gateway will support many independent VPN connections from many *remote systems*, or *remote gateways* to smaller branch office networks, or

suppliers (for example). The term 'VPN connection' is another term referring to what is generally called an 'IP Sec tunnel', ...

(emphasis added). The tunnel 138 of FIG. 12 thus appears to correspond in FIG. 5 to the line connection between VPN gateway A and VPN gateway B, or VPN gateway A and VPN gateway C.

In sum, the tunnel connections of Boden are not taught to be "between" node A1 and VPN gateway A nor "through" network A (42). Because, Boden also fails to teach "establishing a communication tunnel between said client node and said access route through said access network" as recited by claim 1, it is respectfully requested that the Examiner reconsider and withdraw this rejection.

Claims 2, 5, 20, 13, 17, 18, 20 and 21 depend from claim 1 and are allowable at least for the reasons set forth above with respect to claim 1. In addition, these claims recite further combinations of features that are not taught or suggested.

Claim 25:

Claim 25 recites "receiving from said client node serving network information specifying a serving network to which said client node desires to have access." In the Amendment filed March 21, 2007, it was explained that paragraphs 62-72 of Boden relied upon by the Examiner to met this limitation, address actions of VPN gateway A 52 in connection with an *inbound* IPsec'd packet 100 – that is, from a source external to network A. There is no discussion in these paragraphs of "receiving from a client node" the recited serving network information as required by claim 25. Because Boden et al. fails to teach this limitation, for this reason alone, it is respectfully requested that the Examiner

reconsider and withdraws this rejection.

Further, claim 25 recites “establishing a communication tunnel between said client node and said access router through said access network,” As noted above, the tunnel referred to in Boden is not between VPN gateway A and node A1, nor is it through network A. For these additional reasons, it is respectfully asserted that the rejection of claim 25 is improper.

The Examiner did not address this deficiency in the Office Action of May 22, 2007. Again, if the Examiner maintains this rejection, clarification of the Examiner’s reasoning is respectfully requested.

Claims 26 and 27 depend from claim 25 and are allowable at least for the reasons set forth above with respect to claim 25. In addition, these claims recite further combinations of features that are not taught or suggested.

Claims 3, 7, 8, 11, 12, 14-16 and 19:

In sections 22-34 of the Office Action, claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boden et al and Sakov et al (US PGPub 2002/0196802).; claims 8, 11, 12, 14-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boden et al. and Forslow (US PGPub 2002/0069278); and claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boden et al. and Le et al. (US PGPub 2004/0019664). These rejections are respectfully traversed.

Claims 3, 7, 8, 11, 12, 14-16, and 19 depend from claim 1. The Examiner alleges the teachings of Sakov et al., Forslow and Le et al. teach limitations of the dependent claims which are missing from Boden et al., and asserts these

limitations would have been obvious to use with the system of Boden et al. However, these secondary references fail to correct the deficiencies of Boden et al. noted above with respect to claim 1. Thus, the applicants respectfully request the Examiner to reconsider and withdraw these rejections.

It should be noted that the above remarks with respect to the prior art rejections note the Examiner's characterization of certain elements of Boden without argument. However, any lack of argument should not be used to infer agreement.

The Finality of Office Action Should Be Withdrawn:

Finally, the Examiner is respectfully requested to withdraw the finality of the Office Action. MPEP section 706.07(a) states:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement

In this latest Office Action, the Examiner has introduced a new ground of rejection, rejecting the claims under 35 U.S.C. section 102(e). This is the first time this rejection has been made.

The Examiner implies that the finality is still proper since the previous rejection was a result of a typographical error. Whether this is relevant or not, that the rejection of the previous office action (of 12-21-06) was a result of a typographical error would not have been apparent to the Applicant, especially in view of the consistent reference to 35 U.S.C. section 102(b) throughout the

rejection. For example, paragraph 7 sets forth the entire text of 35 U.S.C. section 102(b) and paragraph 8 consistently sets forth the rejection under 35 U.S.C. section 102(b).

In any event, the rejection in the last Office Action of May 22, 2007 is under 35 U.S.C. section 102(e). As this ground of rejection had not been made until this last Office Action, it is a new ground of rejection. Therefore, since the Examiner has introduced "a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement ...," it is respectfully asserted that the finality is improper and requested the Examiner reconsider and withdraw the finality of the Office Action of May 22, 2007.

Conclusion

Applicant respectfully submits that the present application is in condition for allowance, which action is courteously requested. Please charge any shortage in fees that may be due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account 50-4080.

Respectfully submitted,

/Stephen B. Parker, Reg. No. 36,631/

Stephen B. Parker
Registration No. 36,631
WATCHSTONE P+D, plc
1250 Connecticut Ave., N.W.
Suite 700
Washington, DC 20036-2657
(202) 419-1518
(202) 318-4261